Mobile Development Application

Project Scope

It is important to note that students are allowed to reuse the backend and database developed in Lab-Course 2, while building a native or cross-platform mobile application that meets the following minimum requirements:

Mandatory Functional Requirements

1. User Authentication

- o Login/Signup functionality (email, username, or third-party login).
- o Verification and forgot password functionality.

2. Core Feature Set (Minimum of 3 functional modules)

- Examples:
 - Task/To-Do Management
 - Event Calendar
 - Booking System
 - Media Sharing (photos/videos/audio)
 - Messaging or Chat
 - Location-Based Services (maps, check-ins, etc.)
 - Data Visualization or Analytics Dashboard
 - Integration with Device Sensors (e.g., step counter, GPS, camera)

3. API Integration

o Integration with at least one external or self-developed REST API (e.g., weather, news, data fetch).

4. Responsive UI/UX

- o Mobile-friendly design.
- o Intuitive navigation and consistent layout.
- o Designed with Figma, Adobe XD, or similar (optional but recommended).

5. Notifications

o Push or local notifications for relevant user events (e.g., reminders, alerts).

Technical Requirements

- **Platform**: Android (Java/Kotlin) or iOS (Swift), or cross-platform (Flutter, React Native).
- Tools: Android Studio / Xcode / Visual Studio Code
- **Version Control**: Git + GitHub (or GitLab/Bitbucket)
- **Architecture**: Use of clean architecture patterns (e.g., MVVM, MVC)
- **Testing**: Unit testing and/or UI testing must be demonstrated for at least one major feature.

Evaluation Criteria

Criterion	Weight
Functional Completion	25%
UI/UX and Design	20%
Technical Implementation	25%
Code Quality & Documentation	10%
Innovation / Creativity	10%
Presentation & Demo	10%

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